IN THE SPECIFICATION

Please replace, in the abstract, the paragraph beginning at page 21, line 2, with the following amended paragraph:

A system and method for interference reduction in a spread spectrum receiver including a rake receiver having a plurality of fingers for processing a plurality of data signals and an associated plurality of pilot signals is disclosed herein. The method includes generating a plurality of intra-finger interference cancellation signals using the plurality of pilot signals. In this regard each of the plurality of intra-finger interference cancellation signals are associated with one of the plurality of fingers. Ones of the plurality of intra-finger interference cancellation signals are weighted so as to generate a set of weighted intra-finger interference cancellation signals. The method further includes synthesizing at least one inter-finger interference cancellation signal in accordance with the set of weighted intra-finger cancellation signals. At least one inter-finger <u>interference</u> cancellation signal may then be subtracted from a corresponding one of the plurality of data ~~signa~~ <u>signals.</u>

Please replace the paragraph that begins at page 3, line 24, with the following amended paragraph:

FIG. 2 is a block diagram of <u>a</u> conventional [a] Rake receiver module incorporated within the mobile unit receiver of FIG. 1.

Please replace the paragraph that begins at page 5, line 29, with the following amended paragraph:

FIG. 1 is a block diagram ~~is provided~~ of a conventional mobile unit receiver 100, within which may be implemented the adaptive pilot interference cancellation technique of the present

invention. The mobile unit receiver 100 is presumed to be disposed within a mobile unit configured to operate within a CDMA communication system. The mobile unit receiver 100 includes a front-end processing module 104 which receives forward link signal components collected by an antenna 105. The forward link signal components arise upon transmission by a transmitter (not shown) of a CDMA communication signal though a multipath propagation environment to the mobile unit. Typically, a CDMA forward link transmitter is configured to transmit a multi-channel signal to a plurality of user stations. Specifically, the transmitter sends a Walsh pilot signal along with the plurality of data signals to the mobile units. Each of the plurality of data channels are encoded using a different Walsh code which is orthogonal to the Walsh code of other data channels and to the Walsh code of the pilot signal.

Please replace the paragraph that begins at page 6, line 23, with the following amended paragraph:

Referring now to FIG. 2, a block diagram is provided of a conventional Rake receiver module 110. The Rake receiver module 110 includes a number of diversity processing paths 214, or "finger" processors 214, each of which digitally process the data samples 306 ~~106~~ corresponding to an instance of the forward link signal received over one such signal path. Each finger processor 214 processes a particular multipath component of the received signal. Such processing includes despreading the data samples 306 ~~106~~ using a particular user's PN sequence in time alignment with the multipath signal being processed by the applicable finger processor 214. The resultant candidate symbol streams from the finger processors 214 are provided to a diversity combiner module 218, which synthesizes a single composite symbol stream on the basis of these candidate streams. A receive (RX) data processor 222 then receives and decodes the composite symbol stream from the diversity combiner module 218 in order to recover the user data and message information transmitted on the forward link.

Please replace the paragraph that begins at page 7, line 4, with the following amended paragraph:

As mentioned above, each of the finger processors 214 <u>is</u> ~~are~~ used to demodulate and otherwise process an instance of the forward link signal received over a different air path of the multipath propagation environment. Each finger processor 214 is of substantially identical structure, but operates on the basis of different parameters characteristic of its associated air path (e.g., gain, phase and time delay). The Rake receiver module 110 further includes a pilot searcher 210 for detecting various multipath components of the pilot signal being received. This searching is effected using known techniques to correlate the received signal with a PN sequence associated with the pilot signal, thereby detecting the signals transmitted by different base stations and the multi-path components thereof. The pilot searcher 210 provides the detected offsets in the PN signal associated with each multipath component to a finger processor 214 assigned to process such multipath component. The phase reference provided by the detected pilot signals enables each finger processor 214 to perform a coherent demodulation of a given path of the incident multipath-distorted signal.

Please replace the paragraph that begins at page 10, line 3, with the following amended paragraph:

As is indicated by FIG. 11, the module 418 also includes a primary pilot channel scrambling code generator 1130 disposed to produce a PN sequence corresponding to the primary pilot channel. This PN sequence is spread by an OVSF module 1132, which distinguishes the primary pilot channel from user channels and the secondary pilot channel. The output of the OVSF module 1132 is provided to an antenna pattern modulator 1134 as well as to a primary pilot channel multiplier 1138. The antenna pattern modulator 1134 adds an additional modulation pattern to the P-CPICH channel in order to simulate the transmission of the P-CPICH signal from a base station (not shown) having two antennas. The output of the modulator 1134 is connected to a primary pilot channel multiplier <u>1142</u> ~~11142~~, which is also provided with the P-CPICH-2 ChEST model signal. Similarly, the primary pilot channel multiplier 1138 is provided with the P-CPICH1 ChEST model signal. The P-CPICH2 ChEST

and P-CPICH1 ChEST model signals are each derived on the basis of transmissions from one of two antennas disposed at a remote base station (not shown). The results of the multiplications effected by the primary pilot channel multipliers 1138, 1142 are provided to summer 1124. As shown, summer 1124 produces the intra-finger IC signal 440 by combining the signals produced by the primary pilot channel multipliers 1138, 1142 and the secondary pilot channel multipliers 1114, 1120.

Please replace the paragraph that begins at page 11 line 1, with the following amended paragraph:

FIG. 6 provides a more detailed representation of the intra-finger IC module 340. As shown, the finger decimation module 404 includes a decimation control block 504 ~~604~~ and an on-time decimation module 508 ~~608~~. During operation, the decimated sample stream generated by the finger decimation module 404 is provided to the P-CPICH processing module 410 and the S-CPICH processing module 414. The processing modules 410 and 414 respectively detect the P and S pilot channel components present in the decimated sample stream (at one sample per chip) and produce channel estimates of the air interfaces over which the respective P and S pilot channel components were received. In particular, channel estimation may be performed by the P-CPICH processing module 410 by passing the decimated sample stream through a filter matched to the waveform of the P pilot signal. Similarly, the S-CPICH processing module 414 performs channel estimation by passing the decimated sample stream through a filter matched to the waveform of the S pilot signal. By comparing the filtered pilot signals to known replicas of the P and S pilot signals, the processing modules 410 and 414 respectively estimate the amplitude and phase of the P and S pilot channels and generate corresponding channel models. As shown, the channel estimates produced by the processing modules 410 and 414 are provided to a channel estimation multiplexer 616.